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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO
10/714,355	11/14/2003	Steven E. Lentsch	163.1204USC3	3328
23552	7590 03/14/20		EXAM	INER
MERCHANT & GOULD PC P.O. BOX 2903			DOUYON,	LORNA M
	LIS, MN 55402-09		ART UNIT	PAPER NUMBER
	,		1751	
			DATE MAILED: 03/14/200	5

Please find below and/or attached an Office communication concerning this application or proceeding.

		<i>W</i>				
	Application No.	Applicant(s)				
	10/714,355	LENTSCH ET AL.				
Office Action Summary	Examiner	Art Unit				
	Lorna M. Douyon	1751				
The MAILING DATE of this communication Period for Reply	appears on the cover sheet w	un the correspondence address				
A SHORTENED STATUTORY PERIOD FOR RE THE MAILING DATE OF THIS COMMUNICATIO - Extensions of time may be available under the provisions of 37 CFF after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a - If NO period for reply is specified above, the maximum statutory per - Failure to reply within the set or extended period for reply will, by stany reply received by the Office later than three months after the mearned patent term adjustment. See 37 CFR 1.704(b).	N. R 1.136(a). In no event, however, may a r reply within the statutory minimum of thir riod will apply and will expire SIX (6) MON atute, cause the application to become AB	eply be timely filed by (30) days will be considered timely. ITHS from the mailing date of this communication. BANDONED (35 U.S.C. § 133).				
Status						
1) Responsive to communication(s) filed on 1	4 November 2003.					
2a) ☐ This action is FINAL . 2b) ☒ 1	☐ This action is FINAL. 2b) ☑ This action is non-final.					
.—	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.					
Disposition of Claims						
4) ☐ Claim(s) 1 is/are pending in the application 4a) Of the above claim(s) is/are withe 5) ☐ Claim(s) is/are allowed. 6) ☐ Claim(s) 1 is/are rejected. 7) ☐ Claim(s) is/are objected to. 8) ☐ Claim(s) are subject to restriction and	drawn from consideration.					
Application Papers		•				
9) ☐ The specification is objected to by the Exam 10) ☑ The drawing(s) filed on 14 November 2004 Applicant may not request that any objection to Replacement drawing sheet(s) including the cor 11) ☐ The oath or declaration is objected to by the	is/are: a)⊠ accepted or b)□ the drawing(s) be held in abeyar rection is required if the drawing	nce. See 37 CFR 1.85(a). (s) is objected to. See 37 CFR 1.121(d).				
Priority under 35 U.S.C. § 119						
12) Acknowledgment is made of a claim for fore a) All b) Some * c) None of: 1. Certified copies of the priority docum 2. Certified copies of the priority docum 3. Copies of the certified copies of the papplication from the International But * See the attached detailed Office action for a	ents have been received. ents have been received in A priority documents have been reau (PCT Rule 17.2(a)).	pplication No received in this National Stage				
Attachment(s)	A) 🗖 Imbani'a (Summany (PTO 413)				
 Notice of References Cited (PTO-892) Notice of Draftsperson's Patent Drawing Review (PTO-948) Information Disclosure Statement(s) (PTO-1449 or PTO/SB. Paper No(s)/Mail Date 	Paper No(Summary (PTO-413) s)/Mail Date nformal Patent Application (PTO-152) 				

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1. Claims 2-18 have been cancelled in a communication dated November 14, 2003. Claim 1 is pending.

Specification

- 2. The disclosure is objected to because of the following informalities:
 - a) On page 1, line 27, "Patent Nos. 32,762" should have been "... 32,763";
- b) A superscript should be added after "Powder Premix" in the appropriate portion of the Table in Example 4 on page 28.

Appropriate correction is required.

Claim Rejections - 35 USC § 103

- 3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 4. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later

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invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

5. Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over Gordon et al. (U.S. Patent No. 5,650,017), hereinafter "Gordon".

Gordon teaches detergent tablets for dish washing (see abstract, col. 9, lines 57-61) which comprises from about 1 to about 90% of silica granules which comprises: 1-90% by weight of silica; 0-98% by weight of alkali metal salt of tripolyphosphate; 0-98% by weight of alkali metal carbonate; 0-20% by weight of alkali metal silicate; 0-10% by weight of organic phosphonate and 1-25% by weight of moisture (see col. 7, lines 10-26). Gordon also discloses a silicate having a ratio of 2.8 (see Example 4). Other ingredients include between 5% and 95% by weight of builders like sodium carbonate, phosphates, water-soluble polyphosphonates including potassium salts of ethane-1-hydroxy-1,1-diphosphonic acid and potassium salts of methylenediphosphonic acid (see (col. 10, lines 19-33, 52-55) Gordon, however, fails to disclose a tablet wherein the ingredients are within the bounds presently claimed.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to optimize the proportions of sodium carbonate, alkali metal silicate and organic phosphonate of Gordon through routine experimentation for best results. As to optimization results, a patent will not be granted based upon the optimization of result effective variables when the optimization is obtained through routine experimentation unless there is a showing of unexpected results which properly rebuts the *prima facie* case of obviousness. See *In re Boesch*, 617 F.2d 272, 276, 205 USPQ 215, 219 (CCPA 1980). See also *In re Woodruff*, 919 F.2d 1575,

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1578, 16 USPQ2d 1934, 1936-37 (Fed. Cir. 1990), and *In re Aller*, 220 F.2d 454, 456, 105 USPQ 233, 235 (CCPA 1955).

6. Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hartman et al. (U.S. Patent No. 5,559,089), hereinafter "Hartman".

Hartman teaches a dishwashing composition in solid form, e.g., tablets, which are substantially free of inorganic phosphate builders, and which comprises monopersulfate salt; pH adjusting agent which comprises from 0% to about 30% of the composition of sodium carbonate and from 0% to about 35% of sodium silicate having SiO₂:Na₂O ratio in the range from about 1.6 to about 3 and having water levels of about 15 to about 25% (see col. 15, lines 53-57); from 0% to about 4% by weight of the composition of a bleach stabilizer like organic phosphorus-containing sequestrants; and from about 0% to about 10% by weight of the composition of a low-sudsing surfactant (see col. 3, line 7 to col. 4, line 54). Hartman, however, fails to disclose a composition wherein the ingredients are within the bounds presently claimed.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to optimize the proportions of sodium carbonate, sodium silicate and organic phosphonate of Hartman through routine experimentation for best results. As to optimization results, a patent will not be granted based upon the optimization of result effective variables when the optimization is obtained through routine experimentation unless there is a showing of unexpected results which properly rebuts the *prima facie* case of obviousness. See *In re Boesch*, 617 F.2d 272, 276, 205 USPQ 215, 219 (CCPA 1980). See also *In re Woodruff*, 919 F.2d 1575,

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1578, 16 USPQ2d 1934, 1936-37 (Fed. Cir. 1990), and *In re Aller*, 220 F.2d 454, 456, 105 USPQ 233, 235 (CCPA 1955).

7. Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bruegge et al. (US Patent No. 5,061,392), hereinafter "Bruegge".

Bruegge teaches a paste or solid detergent for use in warewashing machines which is prepared by combining two component solutions in an extruder and the formed detergent extruded as a defined shape (see abstract, col. 2, lines 46-48; col. 5, lines 23-26), wherein the first solution comprises 1-70% potassium tripolyphosphate; 0-25% additional detergent builders and 30-70% water, wherein the additional detergent components include 0-15% carbonate, 0-30% surfactant, 0-10% phosphonate and 0-20% silicates like sodium metasilicate, and the second solution is a concentrated solution of one or more water soluble sodium compositions like sodium hydroxide, sodium carbonate and sodium metasilicate (see col. 4, lines 39-47; col. 5, lines 23-53). Bruegge, however, fails to disclose a composition wherein the ingredients are within the bounds presently claimed.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to optimize the proportions of sodium carbonate, silicates and phosphonate of Bruegge through routine experimentation for best results. As to optimization results, a patent will not be granted based upon the optimization of result effective variables when the optimization is obtained through routine experimentation unless there is a showing of unexpected results which properly rebuts the *prima facie* case of obviousness. See *In re Boesch*, 617 F.2d 272, 276, 205

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USPQ 215, 219 (CCPA 1980). See also *In re Woodruff*, 919 F.2d 1575, 1578, 16 USPQ2d 1934, 1936-37 (Fed. Cir. 1990), and *In re Aller*, 220 F.2d 454, 456, 105 USPQ 233, 235 (CCPA 1955).

Double Patenting

8. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

- 9. Claim 1 is rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 1 of each of US Patent No. 6,156,715, U.S. Patent No. 6,410,495 and US Patent No. 6,660,707. Although the conflicting claims are not identical, they are not patentably distinct from each other because all sets of claims are drawn to the same solid block detergent compositions having similar ingredients and overlapping proportions.
- 10. Claim 1 is rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 15 of U.S. Patent No. 6,177,392 in view of Backes et al. (US Patent No. 5,419,850), hereinafter "Backes".

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The above patent teaches a similar solid block warewashing composition with the exception of an alkali metal silicate having a M₂O:SiO₂ ratio of about 1:1 to 1:5.

Backes teaches that silicates such as sodium silicates are added to block or solid, cast detergents to provide improved corrosion protection for overglaze, glassware and soft metal applications. Backes also teaches that the silicates provide an alkalinity source and also improve fluidity during the pour cycle. Sodium metasilicates and liquid silicates such as RU®Silicate (SiO₂/Na₂O ratio=2.4) are typically used in formulations (see col. 7, lines 34-41).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate silicates into the composition of US '392 because such addition would provide improved corrosion protection for overglaze, glassware and soft metal applications as taught by Backes.

11. Claim 1 is rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 1 of U.S. Patent No. 6,258,765 in view of Backes.

The above patent teaches a similar solid composition with the exception of an alkali metal silicate having a M₂O:SiO₂ ratio of about 1:1 to 1:5.

Backes teaches that silicates such as sodium silicates are added to block or solid, cast detergents to provide improved corrosion protection for overglaze, glassware and soft metal applications. Backes also teaches that the silicates provide an alkalinity source and also improve fluidity during the pour cycle. Sodium metasilicates and liquid silicates such as RU®Silicate (SiO₂/Na₂O ratio=2.4) are typically used in formulations (see col. 7, lines 34-41).

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taught by Backes.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate silicates into the composition of US '765 because such addition would provide improved corrosion protection for overglaze, glassware and soft metal applications as

12. Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Lorna M. Douyon whose telephone number is (571) 272-1313.

The examiner can normally be reached on Mondays-Fridays from 8:00AM to 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Yogendra Gupta can be reached on (571) 272-1316. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

> Lorn M. Dauym Lorna M. Douyon **Primary Examiner** Art Unit 1751